

Weekly

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## Illness Associated with Red Tide — Nassau County, Florida, 2007

A "red tide" is a harmful algal bloom that occurs when toxic, microscopic algae in seawater proliferate to a higher-thannormal concentration (i.e., bloom), often discoloring the water red, brown, green, or yellow. Red tides can kill fish, birds, and marine mammals and cause illness in humans (1). Florida red tide is caused by the dinoflagellate Karenia brevis, which produces toxins called brevetoxins and is most commonly found in the Gulf of Mexico; however, K. brevis blooms also can occur along the Atlantic coast. On September 25, 2007, a cluster of respiratory illnesses was reported to the Nassau County Health Department (NCHD) in northeastern Florida. All of the ill persons were employed at a beach restoration worksite by a dredging company operating at Fernandina Beach; they reported symptoms of eye or respiratory irritation (e.g., coughing, sneezing, sniffling, and throat irritation). NCHD and the Florida Department of Health promptly conducted epidemiologic and environmental investigations and determined the illnesses likely were associated with exposure to a red tide along the Atlantic coast. These actions highlight the importance of rapid investigation of health concerns with potential environmental causes to enable timely notification of the public and prevent further illness.

## **Epidemiologic Investigation**

The dredging company had been contracted by the U.S. Army Corps of Engineers to clear a channel for military submarines to navigate the Amelia River. During September 25– 29, as part of this operation, the company was dredging material off the ocean floor from a ship located 3 miles offshore, near the mouth of the river. The dredged material was pumped through a pipe from the ship to the beach worksite. Approximately 50 dredging company workers were stationed aboard the ship and 13 at the beach worksite, where they redistributed the piped mix of sediment on the beach. All of the dredging company employees worked 12-hour shifts. Ship workers spent a greater portion of their shifts working indoors than did beach workers and had varying levels of exposure to outdoor elements.

On September 25, after receiving the initial reports of respiratory illness among the dredging company workers, NCHD staff members suspected the cause might be exposure to a chemical toxin. However, when staff members visited the Fernandina Beach worksite on the same day, they observed dead fish and detected the characteristic odor of brevetoxin, the toxin produced naturally by K. brevis. During September 25-26, NCHD conducted interviews with workers in two groups: those working at the beach worksite and those working aboard the company ship. The interviews used a standard questionnaire for outbreaks to assess exposure to dredging materials, occupational and recreational water exposure, travel history, medical history, and current health status. Ten of the 13 beach workers with daytime exposure history (the other three worked only at night) were interviewed, followed by the first 10 workers who were available on the ship. Because of logistical difficulties, additional workers on the ship could not be interviewed.

Mean age of the 20 dredging company workers was 45 years (range: 23–66 years); 90% were male. Six workers reported preexisting health conditions, including two with asthma. Nine of the 20 reported a recent history of smoking. The 20 workers reported experiencing symptoms of respiratory or eye irritation beginning September 16, when the dredging operation began. Predominant symptoms were coughing (12 workers), throat irritation (12), eye irritation (11), sneezing (11), and sniffling (10) (Table 1). None of the workers required medical care or experienced impairment of their ability to do their

### INSIDE

720 West Nile Virus Activity — United States, 2007723 QuickStats

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TABLE 1. Number of interviewed dredging company workers who reported eye or respiratory symptoms during red tide (*Karenia brevis*) algal bloom, by worksite — Nassau County, Florida, 2007

	Total	Beach	Aboard ship
Symptom	(N = 20)	(n = 10)	(n = 10)
Coughing	12	10	2
Throat irritation	12	9	3
Eye irritation	11	10	1
Sneezing	11	9	2
Sniffling	10	9	1
Mucous with cough	9	7	2
Breathing difficulty	5	4	1

jobs. Several reported abrupt onset and resolution of their symptoms upon arrival and departure each day from the beach worksite.

During September 25–29, additional reports of respiratory irritation were received by public health agencies from persons along Florida's Atlantic coast, up to 200 miles south of Fernandina Beach. Also during this period, approximately 15– 20 reports were received daily by NCHD from beachgoers with symptoms of respiratory illness.

### **Environmental Assessment**

On September 25, water samples were collected from the Atlantic Ocean near the Fernandina Beach shoreline for evaluation by the Fish and Wildlife Research Institute of the Florida Fish and Wildlife Conservation Commission. Light microscopy was performed to assess algal species composition and abundance.

The water samples from near the Fernandina Beach worksite first revealed *K. brevis* on September 25. Within 2 weeks, samples with *K. brevis* had been collected from additional locations up to 200 miles to the south (2). The initial water samples had "medium" levels of *K. brevis* (100,000 to <1,000,000 cells/L), which can cause respiratory irritation and fish kills (Table 2). However, September 26, water samples collected in Jacksonville, 35 miles south of Fernandina Beach, had "high" levels ( $\geq$ 1,000,000 cells/L), which can cause seawater discoloration in addition to respiratory irritation and probable fish kills. Onshore wind patterns likely facilitated the transport of aerosolized brevetoxins, resulting in exposure to beachgoers.

On September 29, a storm with prolonged wind, rain, and flooding struck northeast Florida, and public reports of respiratory symptoms began to decline. Water samples collected after September 29 detected "low a" levels of *K. brevis* (>1,000 to <5,000 cells/L) and "present" levels ( $\leq$ 1,000 cells/L), indicating that the storm likely contributed to dissipation of the red tide (Table 2). On November 8, all five water samples collected in Nassau County had cell counts of zero (*3*).

Classification	K. brevis (cells/L)	Possible effects (K. brevis only)
Present	background levels of ≤1,000 cells	None
Very low a	>1,000 to <5,000	Possible respiratory irritation
Very low b	5,000 to 10,000	Possible respiratory irritation and requisite shellfish harvesting closures
Low a	>10,000 to <50,000	Respiratory irritation, but chlorophyll levels too low to be detected by satellites
Low b	50,000 to <100,000	Respiratory irritation, possible fish kills, and bloom chlorophyll probably detected by satellites
Medium	100,000 to <1,000,000	Respiratory irritation and probable fish kills
High	<u>≥</u> 1,000,000	As above, plus discoloration

# TABLE 2. Laboratory classifications and possible effects of *Karenia brevis*, by cell count — Fish and Wildlife Research Institute, Florida Fish and Wildlife Conservation Commission

### **Public Health Actions**

During the red tide event, NCHD issued several beach advisories, beginning September 25, alerting the public to the health risks of exposure to brevetoxins, especially for persons with preexisting respiratory conditions. Advisories were disseminated using Nassau County Emergency Management (NCEM) and NCHD communications systems and "blast faxes" to local physicians, veterinarians, schools, governmental organizations, hotels, and restaurants. In addition, advisories were posted at beach locations, in local newspapers, and on NCHD and NCEM websites. Persons who experienced respiratory irritation or sought additional red tide information were instructed to contact NCHD or the Florida Poison Control Center's Aquatic Toxins Hotline.

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Editorial Note: The initial detection of the 2007 northeast Florida red tide described in this report was unusual because public health authorities were first alerted by a cluster of reported symptoms of human respiratory illness among dredging workers rather than by more common means (e.g., observation of dead fish or birds, detection of contaminated seafood, or use of satellite imagery or routine beach water sampling). Upon initial investigation of the human illnesses, NCHD observed dead fish and detected the odor of brevetoxin, both indications of red tide. Water sampling confirmed that an ongoing red tide bloom was in the proximity. Because only a small convenience sample of workers could be interviewed on the dredging ship, no conclusions can be drawn about the relative prevalence of red tide symptoms at the two worksites. However, the results suggest that symptoms occurred more frequently among beach workers. During red tides, symptoms are frequently more intense in persons exposed on beaches, because of aerosolization of brevetoxins in beach surf (4).

Wildlife species have been particularly valuable sentinels for human brevetoxin illness. In the past, the Florida Department of Health has used reports of dead fish or birds (which eat contaminated fish) as an early warning mechanism for red tide blooms (5). During the red tide event described in this report, dead sea turtles were observed on Nassau County beaches. Brevetoxin also accumulates in molluscan shellfish and is associated with human neurotoxic shellfish poisoning when contaminated seafood is ingested (6). Shellfish beds in Florida coastal waters are sampled routinely for brevetoxin.

Studies attempting to assess the human health effects of red tide blooms have been reported. One study, in Sarasota, Florida, found a 19% increase in the rate of pneumonia cases diagnosed during a 3-month onshore red tide event and, among coastal residents, a 54% higher rate of diagnoses of respiratory illness (pneumonia, bronchitis, asthma, and upper airway disease) (7). Other studies have found significant measureable adverse changes in the lung function of asthma patients after exposure to brevetoxins (6,8).

Red tide blooms have been uncommon in northeastern Florida, occurring with much greater frequency in the Gulf of Mexico. Florida red tide was first documented on the Atlantic coast in 1972, south of Fernandina Beach, and further south in Jacksonville in 1980 and 1999 (9). Florida records indicate that, before the 2007 bloom, *K. brevis* had not been detected in Nassau County since 1953; that detection was not associated with a red tide event.

In addition to the limited number of interviews with the ship workers, the findings in this report are subject to at least two other limitations. First, assessment of symptom onset dates was not possible because symptom-specific onset dates were not collected. Second, systematic collection of data on symptoms of other persons in the area of the bloom was not possible; therefore, the effects of the red tide event among populations other than the dredging company workers (e.g., beachgoers) could not be assessed.

During this red tide event, prompt investigation of a small cluster of symptoms led to quick identification of the *K. brevis* bloom. This public health vigilance enabled authorities to take immediate action to issue advisories and otherwise alert the public to an illness of environmental etiology.

#### References

1. Fish and Wildlife Research Institute. Red tides in Florida. St. Petersburg, FL: Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute; 2008. Available at http:// www.floridamarine.org/features/view\_article.asp?id=24936.

- Fish and Wildlife Research Institute. *Karenia brevis* counts, September 24–28, 2007. St. Petersburg, FL: Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute; 2007. Available at http://research.myfwc.com/gallery/image\_details.asp?id=27000.
- Fish and Wildlife Research Institute. *Karenia brevis* counts, November 3–9, 2007. St. Petersburg, FL: Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute; 2007. Available at http://research.myfwc.com/gallery/image\_details.asp?id=27104.
- Backer LC, Kirkpatrick B, Fleming LE, et al. Occupational exposure to aerosolized brevetoxins during Florida red tide events: effects on a healthy worker population. Environ Health Perspect 2005;113:644–9.
- Fish and Wildlife Research Institute. Fish kill database search. St. Petersburg, FL: Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute; 2007. Available at http://research.myfwc.com/fishkill.
- 6. Fleming LE, Kirkpatrick B, Backer LC, et al. Initial evaluation of the effects of aerosolized Florida red tide toxins (brevetoxins) in persons with asthma. Environ Health Perspect 2005;113:650–7.
- Kirkpatrick B, Fleming LE, Backer LC, et al. Environmental exposures to Florida red tides: effects on emergency room respiratory diagnoses admissions. Harmful Algae 2006;5:526–33.
- Fleming LE, Kirkpatrick B, Backer LC, et al. Aerosolized red-tide toxins (brevetoxins) and asthma. Chest 2007;131:187–94.
- 9. Fish and Wildlife Research Institute. East Coast red tide history. St. Petersburg, FL: Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute; 2007. Available at http://research.myfwc.com/engine/download\_redirection\_process.asp? file=east\_coast\_red\_tide\_summary.pdf&objid=8939&dltype=article.

## West Nile Virus Activity — United States, 2007

West Nile virus (WNV) is the leading cause of arboviral encephalitis in the United States. Originally identified in Africa in 1937, WNV was first detected in the western hemisphere in 1999 in New York City. Since then, WNV has caused seasonal epidemics of febrile illness and neurologic disease in the United States. This report summarizes national WNV surveillance data for 2007. WNV transmission to humans or animals expanded into 19 counties that had not reported transmission previously and recurred in 1,148 counties where transmission had been reported in previous years. A total of 1,227 cases of WNV neuroinvasive disease (WNND) and 117 deaths were reported. These findings highlight the need for ongoing surveillance, mosquito control, promotion of personal protection from mosquito bites, and research into additional prevention strategies, including a WNV human vaccine.

WNV data are reported to CDC through ArboNET, an Internet-based arbovirus surveillance system managed by state health departments and CDC. State and local health departments 1) collect reports from health-care providers and clinical laboratories regarding cases of WNV disease in humans; 2) collect reports of WNV presumptive viremic blood donors (PVDs)\* from blood collection agencies; 3) collect and test dead birds, often focusing on corvids (e.g., crows, jays, and magpies), which have high mortality attributed to WNV infection; 4) collaborate with veterinarians to collect reports of WNV infection in nonhuman mammals; and 5) collect mosquitoes to test for evidence of WNV infection. Human WNV disease cases are classified as 1) WNND (i.e., meningitis, encephalitis, or acute flaccid paralysis); 2) West Nile fever (WNF), which is symptomatic WNV disease that does not affect the nervous system; or 3) an unspecified clinical syndrome. WNF reporting is highly variable by jurisdiction, depending on the level of interest in reporting and use of diagnostic testing; therefore, most of this report focuses on WNND cases, which are thought to be more consistently identified and reported because of the severity of the illness.

### **Human Surveillance**

During 2007, a total of 3,630 cases of WNV disease in humans were reported from 775 counties in 44 states (i.e., 25% of the 3,142 counties in the United States). Of these cases, 1,227 (34%) were WNND, 2,350 (65%) were WNF, and 53 (1%) were unspecified clinical syndromes. A total of 352 PVDs were identified through routine screening of the blood supply. Of these PVDs, 281 (80%) were asymptomatic, five (1%) subsequently developed WNND, and 66 (19%) subsequently had WNF.

Overall, the incidence of WNND in the United States was 0.4 per 100,000 population. The highest incidence of WNND occurred primarily in the west-central United States (Figure 1); the five states with highest incidence were North Dakota (7.7 cases per 100,000 residents), South Dakota (6.2), Wyoming (4.6), Montana (4.0), and Colorado (2.2). Among all states, WNND peaked during the first week in August, and 1,086 (89%) cases were reported during July–September (Figure 2). This seasonality was consistent with trends observed in the preceding 7 years.

Of the 1,227 WNND cases, 729 (59%) occurred in males. The median age of patients was 57 years (range: 1 month–97 years), with increasing incidence among older age groups (Figure 3). Overall, 1,089 (89%) patients were hospitalized (median age: 59 years; range: 1 month–97 years), and 117 (10%) died (median age: 77 years; range: 43–96 years). A total of 765 (62%) WNND cases were classified as encephalitis, 452 (37%) as meningitis, and 63 (5%) as acute flaccid

<sup>\*</sup> A PVD is a person whose blood tested positive when screened for the presence of WNV. PVDs are followed up by the blood collection agency with additional tests to verify their infection. Some PVDs go on to develop symptoms after donation, at which point they are considered to have WNV disease.

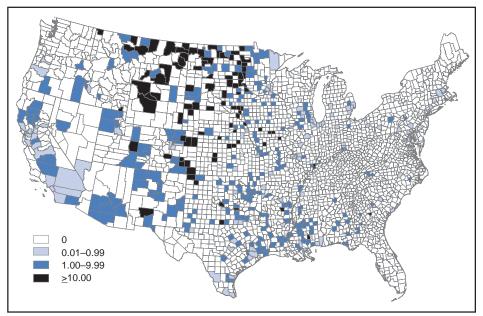
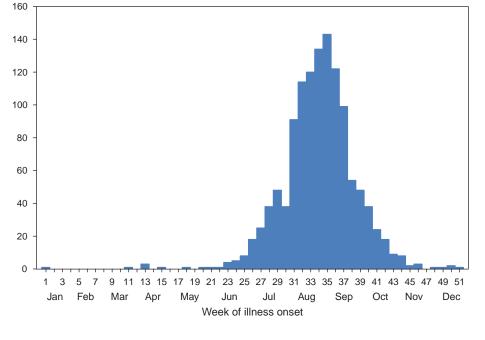


FIGURE 1. Incidence\* of West Nile virus neuroinvasive disease, by area — United States,  $\mathbf{2007}^{\dagger}$ 

\* Per 100,000 population.

<sup>†</sup>Includes meningitis, encephalitis, and acute flaccid paralysis.



# FIGURE 2. Number\* of West Nile virus neuroinvasive disease cases, by week of illness onset — United States, 2007<sup>†</sup>

 $^{*}_{1}$  N = 1,227.  $^{\dagger}_{1}$  Includes meningitis, encephalitis, and acute flaccid paralysis.

paralysis; 53 of these cases were classified as acute flaccid paralysis coincident with encephalitis or meningitis.

### **Animal Surveillance**

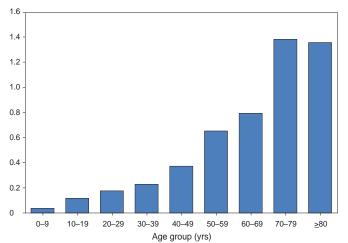
In 2007, a total of 2,182 dead WNVinfected birds were reported from 315 counties in 35 states and Puerto Rico: 157 counties in 28 states and Puerto Rico reported infected birds but no clinically apparent human disease. The number of reported WNV-infected birds peaked during the first week of September. Corvids accounted for 1,690 (77%) of the birds; most states targeted corvids for surveillance. Since 1999, WNV infection has been reported in 321 avian species, including four species (Bronzed Cowbird, Cackling Goose, Le Conte's Thrasher, and Northern Pintail) in which WNV was identified for the first time during 2007.

Of 507 reported cases of WNV disease among nonhuman mammals, 471 (93%) occurred in equines, and 36 (7%) occurred in other species (squirrels [27], canines [five], and unspecified species [four]). Equine cases were reported from 320 counties in 35 states and Puerto Rico; Texas reported 20% of all equine cases. The number of reported WNV-infected equines peaked in mid-August.

## **Mosquito Surveillance**

A total of 8,215 mosquito pools<sup>†</sup> from 371 counties in 39 states, the District of Columbia, and Puerto Rico tested positive for WNV. Among the WNVpositive pools, 6,286 (77%) were made up of *Culex* mosquitoes thought to be the principal vectors of WNV transmission (e.g., *Cx. pipiens, Cx. quinquefasciatus, Cx. restuans, Cx. salinarius*, and *Cx. tarsalis*). Unidentified or other species

<sup>&</sup>lt;sup>†</sup>A sample of mosquitoes (usually no more than 50) of the same species and sex, collected within a defined sampling area and period.



## FIGURE 3. Incidence\* of West Nile virus neuroinvasive disease, by age group — United States, $2007^{\dagger}$

\* Per 100,000 population.

<sup>†</sup> Includes meningitis, encephalitis, and acute flaccid paralysis.

of *Culex* mosquitoes made up 1,746 (21%) pools, and non-*Culex* species (e.g., *Aedes* spp., *Anopheles* spp., *Coquillettidia perturbans*, *Culiseta* spp., and *Uranotaenia sapphirina*) made up 106 (1%) pools. Data from 2007 included the first report of WNV infection in *Culex bahamensis*, which was collected in Puerto Rico. The number of reported WNV-infected mosquito pools peaked during mid-August.

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Editorial Note: In 2007, the reported incidence of WNND in the United States was 0.4 per 100,000 population. This incidence is similar to that reported in 2004 (0.4), 2005 (0.4), and 2006 (0.5), but substantially lower than the reported incidence for 2002 (1.0) and 2003 (1.0) (1,2). The relative stability in the number of reported WNND cases during the past 4 years likely represents endemic WNV transmission in the continental United States. However, because of variation in vectors, avian amplifying hosts, human activity, and environmental factors (e.g., temperature and rainfall), predicting future WNV transmission intensity is difficult (3,4).

Reported cases of WNND are thought to be the most accurate indicator of WNV activity in humans. WNND reporting is thought to be more complete because of substantial associated morbidity and mortality, whereas WNF likely is underdiagnosed and underreported. Serologic surveys indicate that approximately 20% of WNV infections result in WNF and 0.7% of WNV infections result in WNND (5). Based on these estimates, approximately 175,000 WNV infections and 35,000 WNF cases occurred in the United States in 2007. Only 2,350 WNF cases were reported to ArboNET in 2007, representing <10% of the estimated number of WNF cases.

In 2007, evidence of WNV human disease again was detected in all geographic regions of the continental United States. Although the highest incidence of WNND continued to occur in the west-central United States (6), Idaho reported only 10 WNND cases in 2007, a 93% decrease from the 139 cases reported in 2006 (7). This illustrates the wide annual variability and focality of WNV transmission. Human WNV infection was identified for the first time in Puerto Rico in 2007 among three asymptomatic blood donors (8).

ArboNET integrates arboviral diagnostic testing and reporting to produce timely, actionable data that public health professionals use to tailor effective prevention and control messages at the local level. Continued surveillance is important in monitoring potential changes in WNV epidemiology and for providing early warning for local WNND outbreaks. In addition, ArboNET is well positioned to help identify and manage future introductions of exotic arboviruses. For example, cases of ill travelers entering the United States who are likely viremic with nonendemic arboviruses (e.g., dengue virus and chikungunya virus) are reported to ArboNET (9).

WNV vaccines are licensed for use in horses and are being evaluated currently in phase 2 human clinical trials (10). Because no WNV vaccine is available currently for use in humans, prevention depends on personal protective measures. Use of repellents containing DEET, picaridin, oil of lemon eucalyptus, or IR3535 provides effective protection against mosquitoes. Long-sleeved shirts, long pants, and socks provide barrier protection against mosquito bites, and many fabrics can be treated with permethrin to provide an additional level of protection. Avoiding outdoor exposure during dusk and dawn, when Culex mosquito species are more active, will decrease the likelihood of WNV exposure. Household measures, such as installing and repairing window screens and covering or draining water-holding containers to reduce mosquito breeding sites, can decrease further the risk for WNV exposure.

Additional information on effective prevention of WNV infection is available from CDC at http://www.cdc.gov/ ncidod/dvbid/westnile/index.htm. An overview of current year WNV transmission activity is available at http://diseasemaps. usgs.gov/wnv\_us\_human.html.

#### **Acknowledgments**

This report is based, in part, on data provided by ArboNET surveillance coordinators in local and state health departments and ArboNET technical staff, Div of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases, CDC.

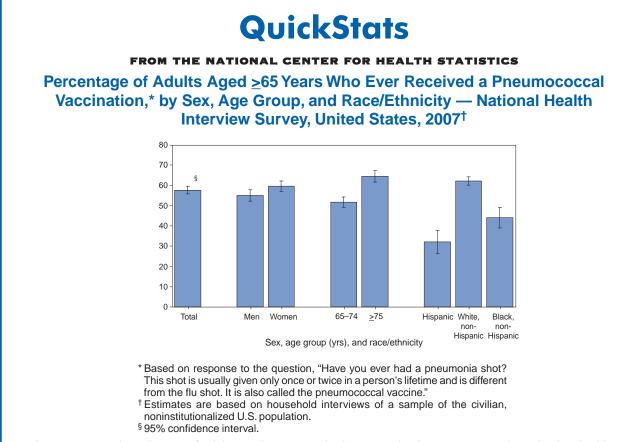
#### References

- 1. CDC. West Nile virus: maps and human cases. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm.
- 2. US Census Bureau. Annual population estimates 2000 to 2007. Washington, DC: US Census Bureau; 2008. Available at http://www.census.gov/popest/states/NST-ann-est.html.
- Komar N. West Nile virus: epidemiology and ecology in North America. Adv Virus Res 2003;61:185–234.
- Hayes EB, Komar N, Nasci RS, Montgomery SP, O'Leary DR, Campbell GL. Epidemiology and transmission dynamics of West Nile virus disease. Emerg Infect Dis 2005;11:1167–73.
- 5. Mostashari F, Bunning ML, Kitsutani PT, et al. Epidemic West Nile encephalitis, New York, 1999: results of a household-based seroepidemiological survey. Lancet 2001;358:261–4.
- 6 Lindsey NP, Kuhn S, Campbell GL, Hayes EB. West Nile virus neuroinvasive disease incidence in the United States, 2002–2006. Vector Borne Zoonotic Dis 2008;8:35–9.
- 7. CDC. West Nile virus activity—United States, 2006. MMWR 2007;56:556–9.

- 8. CDC. Detection of West Nile virus in blood donations—Puerto Rico, 2007. MMWR 2008;57:577–80.
- 9. CDC. Update: chikungunya fever diagnosed among international travelers—United States, 2006. MMWR 2007;56:276–7.
- Monath TP, Liu J, Kanesa-Thasan N, et al. A live, attenuated recombinant West Nile virus vaccine. Proc Natl Acad Sci U S A 2006;103:6694–9.

### Erratum: Vol. 57, No. RR-4

In the *MMWR Recommendations and Reports* (Vol. 57, No. RR-4), "Prevention of Pertussis, Tetanus, and Diphtheria Among Pregnant and Postpartum Women and Their Infants: Recommendations of the Advisory Committee on Immunization Practices (ACIP)," an error occurred on page 4 in Table 1. For the vaccine ADACEL<sup>®</sup>, the fimbriae component of the formulation was omitted; it should be 5  $\mu$ g, followed by the <sup>¶¶¶</sup> footnote symbol.



In 2007, approximately 58% of adults aged  $\geq$ 65 years had ever received a pneumococcal vaccination. In this population, statistically significant differences by sex, age group, and race/ethnicity were observed. Women were more likely than men to have ever received a pneumococcal vaccination. Adults aged  $\geq$ 75 years were more likely to have ever received a pneumococcal vaccination compared with adults aged 65–74 years. Non-Hispanic white adults aged  $\geq$ 65 years were more likely than Hispanic and non-Hispanic black adults in that age group to have received the vaccination.

**SOURCE:** Heyman KM, Schiller JS, Barnes P. Early release of selected estimates based on data from the 2007 National Health Interview Survey. US Department of Health and Human Services, CDC, National Center for Health Statistics; 2008. Available at http://www.cdc.gov/nchs/about/major/nhis/released200806.htm. TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 28, 2008 (26th Week)\*

	Current	Cum	5-year weekly	Total o	ases rep	orted for	previou	s years	
Disease	week	2008		2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax	_	_	_	1	1	_	_	_	
Botulism:									
foodborne	_	4	0	32	20	19	16	20	
infant	_	32	2	85	97	85	87	76	
other (wound & unspecified)		6	1	27	48	31	30	33	
Brucellosis	2	39	2	130	121	120	114	104	CA (2)
Chancroid	1	23	1	23	33	17	30	54	NY (1)
Cholera	_	_	0	7	9	8	6	2	
Cyclosporiasis§	4	45	10	92	137	543	160	75	FL (3), TN (1)
Diphtheria	_							1	1 = (0), 11 (1)
Domestic arboviral diseases <sup>§,¶</sup> :									
California serogroup	_	_	3	53	67	80	112	108	
eastern equine		_	0	4	8	21	6	100	
Powassan			0	7	1	1	1		
St. Louis		_	0	9	10	13	12	41	
		_		9	10	15	12	41	
western equine		_		_	_	_	_	_	
Ehrlichiosis/Anaplasmosis <sup>§,**</sup> :	7	0.4	17	000	E70	FOC	220	224	
Ehrlichia chaffeensis	7	94	17	828	578	506	338	321	MD (3), VA (2), FL (1), AL (1)
Ehrlichia ewingii	_								
Anaplasma phagocytophilum	_	33	22	834	646	786	537	362	
undetermined		2	11	337	231	112	59	44	
Haemophilus influenzae, <sup>††</sup>									
invasive disease (age <5 yrs):									
serotype b	_	17	0	23	29	9	19	32	
nonserotype b	_	89	3	197	175	135	135	117	
unknown serotype	2	115	3	181	179	217	177	227	MO (1), CO (1)
Hansen disease <sup>§</sup>	_	33	2	101	66	87	105	95	
Hantavirus pulmonary syndrome§	—	6	1	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	7	60	6	292	288	221	200	178	OH (1), MO (2), OK (1), CA (3)
Hepatitis C viral, acute	6	351	15	856	766	652	720	1,102	NY (1), OH (1), MI (1), VA (1), OK (1), CA (1)
HIV infection, pediatric (age <13 yrs)§§	_	—	4	—	—	380	436	504	
Influenza-associated pediatric mortality <sup>§,¶¶</sup>	2	87	1	70	43	45	—	N	KY (1), TX (1)
Listeriosis	7	237	17	808	884	896	753	696	OH (1), NC (1), TN (1), OK (3), CA (1)
Measles***	1	113	2	43	55	66	37	56	CA (1)
Meningococcal disease, invasive <sup>†††</sup> :									
A, C, Y, & W-135	3	154	5	323	318	297	—	_	NC (1), OK (1), WA (1)
serogroup B	_	87	4	166	193	156	—	_	
other serogroup	_	18	0	34	32	27	—	_	
unknown serogroup	9	361	11	553	651	765	—	_	OH (1), NC (2), SC (1), FL (1), AL (1), CA (3)
Mumps	2	236	20	799	6,584	314	258	231	NY (1), KS (1)
Novel influenza A virus infections	_	_		1	N	N	N	N	
Plague	_	1	0	7	17	8	3	1	
Poliomyelitis, paralytic	_	_		_	_	1	_	_	
Poliovirus infection, nonparalytic§	_	_	_	_	N	N	N	N	
Psittacosis§	_	4	0	12	21	16	12	12	
Q fever <sup>§,§§§</sup> total:	_	46	3	171	169	136	70	71	
acute	_	42	_	_	_	_	_	_	
chronic	_	4	_	_	_	_	_	_	
Rabies, human	_	_	0	1	3	2	7	2	
Rubella <sup>¶¶</sup>	1	7	0	12	11	11	10	7	ND (1)
Rubella, congenital syndrome		_	_		1	1	_	1	
SARS-CoV <sup>§,****</sup>	_	_	_	_	_	_	_	8	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

\* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

<sup>¶</sup> Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

\*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).

<sup>††</sup> Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

<sup>§§</sup> Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

<sup>11</sup> Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Eighty-five cases occurring during the 2007–08 influenza season have been reported.

\*\*\* The one measles case reported for the current week was imported.

ttt Data for meningococcal disease (all serogroups) are available in Table II.

§§§ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

The one rubella case reported for the current week was unknown.

\*\*\*\* Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

## TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 28, 2008 (26th Week)\*

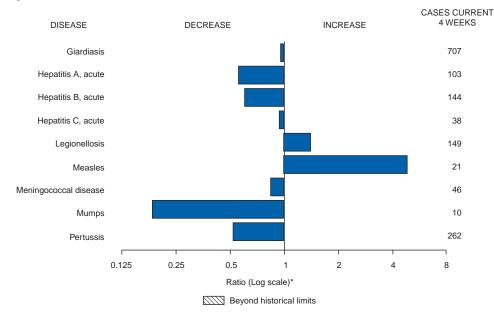
	Current	Cum	5-year weeklv	Total of	ases rep	orted for	previou	s years	
Disease	week	2008	averaget	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Smallpox§	_	_	_	_	_	_	_	_	
Streptococcal toxic-shock syndrome§	2	80	2	132	125	129	132	161	CT (2)
Syphilis, congenital (age <1 yr)	_	84	8	427	349	329	353	413	
Tetanus		2	1	27	41	27	34	20	
Toxic-shock syndrome (staphylococcal)§	3	31	2	92	101	90	95	133	CA (3)
Trichinellosis	_	4	0	5	15	16	5	6	
Tularemia	1	23	5	137	95	154	134	129	OR (1)
Typhoid fever	3	173	7	434	353	324	322	356	WA (1), CA (2)
Vancomycin-intermediate Staphylococcus auro	eus§ —	4	0	28	6	2	_	N	
Vancomycin-resistant Staphylococcus aureus§	_	_	_	2	1	3	1	N	
Vibriosis (noncholera Vibrio species infections)	)§ 7	85	3	421	N	N	N	N	MD (1), VA (2), FL (4)
Yellow fever	_	_	—	_	_	_	_	_	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

\* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.



## FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals June 28, 2008, with historical data

\* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

Notifiable Disease Data Team and 122 Cities Mortality Data TeamPatsy A. HallDeborah A. AdamsRosaline DharaWillie J. AndersonMichael S. WodajoLenee BlantonPearl C. Sharp

(26th Week)*	⊱k)* Chlamydia <sup>†</sup>						0					0			
		Pre	vious	lia				ioidomy vious	COSIS				otosporid vious	IOSIS	
Reporting area	Current week		veeks Max	Cum 2008	Cum 2007	Current week		weeks Max	Cum 2008	Cum 2007	Current week		veeks Max	Cum 2008	Cum 2007
United States	11,074	21,368	28,892	516,470	537,740	50	127	341	3,241	3,894	49	84	975	1,691	1,578
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire Rhode Island <sup>§</sup> Vermont <sup>§</sup>	796 303 414  60 19	676 201 47 313 39 56 16	1,516 1,093 67 660 73 98 36	17,203 4,767 1,181 8,631 982 1,445 197	17,167 4,976 1,286 7,871 983 1,548 503	N N N   N	0 0 0 0 0 0	1 0 0 1 0 0	1 N N 1 N	2 N N 2 N		6 0 1 2 1 0 1	17 15 5 11 4 3 4	107 15 10 31 25 4 22	128 42 14 37 16 5 14
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	2,217 252 460 1,084 421	2,749 405 561 987 803	4,843 528 2,177 3,148 1,031	71,405 8,422 13,543 28,853 20,587	70,435 10,727 12,802 25,126 21,780	N N N	0 0 0 0	0 0 0 0	N N N N N	Z Z Z Z Z	$\frac{10}{4}$	12 1 5 2 6	120 8 20 8 103	226 10 73 38 105	192 11 54 33 94
<b>E.N. Central</b> Illinois Indiana Michigan Ohio Wisconsin	948 17 298 419 93 121	3,496 1,002 390 754 868 378	4,373 1,711 656 1,222 1,530 615	82,857 20,649 10,193 22,460 20,596 8,959	89,701 25,599 10,754 19,232 24,323 9,793	N N   N	1 0 0 0 0	3 0 2 1 0	20 N 13 7 N	16 N 12 4 N	9 — 2 4 3	22 2 4 6 7	134 13 41 11 60 60	410 36 67 79 113 115	351 41 26 72 87 125
W.N. Central Iowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	806 222 195 — 372 — 17	1,228 163 161 261 468 89 33 54	1,693 251 529 373 577 162 65 81	31,151 4,249 4,588 5,971 12,104 2,064 832 1,343	30,953 4,257 4,012 6,634 11,381 2,577 862 1,230	N N     N N N N N N N N N N N N N N N	0 0 0 0 0 0 0 0	77 0 0 77 1 0 0	X Z     Z Z Z	5 N N   5 N N N	7 3 2 1 1	17 4 1 5 3 2 0 1	125 61 15 34 14 24 51 16	300 63 22 81 67 43 2 22	231 43 32 47 43 14 1 51
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	1,748 61 	3,984 65 117 1,302 649 469 215 472 524 60	7,609 150 202 1,555 1,338 683 4,783 3,070 1,062 96	93,968 1,855 3,041 33,819 4,273 10,786 10,142 13,391 15,166 1,495	103,789 1,679 2,957 25,695 20,387 10,277 14,627 14,021 12,550 1,596		0 0 0 0 0 0 0 0 0 0	1 0 1 0 1 0 0 0 0	2 N N N N N N N	2    N N 2 N N N N	13 1 5 3 2 — 2	19 0 8 4 0 1 1 0	65 4 2 35 14 3 18 15 6 5	339 7 3 155 103 11 11 19 23 7	358 3 1 158 80 13 39 28 32 4
<b>E.S. Central</b> Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	768 67 225 — 476	1,517 478 222 314 515	2,394 605 361 1,048 715	38,687 10,889 5,506 8,769 13,523	41,358 12,579 3,867 10,936 13,976	N N N	0 0 0 0	0 0 0 0	N N N N		1  1	4 1 1 1	64 14 40 11 18	50 18 10 6 16	69 24 21 12 12
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	2,038 336  209 1,493	2,715 234 380 235 1,809	4,426 455 851 416 3,923	71,119 7,050 7,909 5,848 50,312	58,530 4,430 9,099 6,148 38,853	N N N	0 0 0 0	1 0 1 0	1 N 1 N	1 N 1 N	1  1 	6 1 0 1 3	29 8 4 11 18	70 13 4 20 33	87 12 27 15 33
Mountain Arizona Colorado Idaho <sup>\$</sup> Montana <sup>\$</sup> Nevada <sup>\$</sup> New Mexico <sup>\$</sup> Utah Wyoming <sup>\$</sup>	329 89  31 128 81 	1,396 477 304 55 50 185 140 115 12	1,836 679 488 233 363 416 561 209 34	29,454 10,651 5,082 1,483 1,466 4,814 3,252 2,695 11	36,915 12,081 8,811 1,925 1,407 4,656 4,742 2,675 618	34 33 N N 1 	90 88 0 0 1 0 0 0	170 168 0 0 7 3 7 1	2,249 2,200 N N 31 13 4 1	2,378 2,301 N N 33 16 28 —	7 5 2 	10 1 2 1 0 2 1 0	567 4 26 71 7 6 9 484 8	156 21 37 29 20 6 23 12 8	121 21 33 7 11 5 33 3 8
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	1,424 84 1,172 5 163	3,378 94 2,825 110 184 248	4,676 129 4,115 152 402 498	80,626 2,287 70,509 2,716 5,001 113	88,892 2,433 69,253 2,859 4,775 9,572	16 N 16 N N N	30 0 30 0 0	217 0 217 0 0 0	968 N 968 N N N	1,490 N 1,490 N N N	1   1	2 0 0 2 0	20 2 0 4 16 0	33 1 1 31	41 1 
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	8 — 94 —	0  116 6	22  26 612 21	70 — 93 3,551 292	73 	N  -   	0 0 0 0	0 0 0 0	N  N	N  -   	N  N	0  0 0	0 0 0 0	N  N	N  N

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly. Chamydia refers to genital infections caused by *Chlamydia trachomatis*. S Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

(20th week)	Giardiasis						G	onorrhe	a		Hae		<i>is influen</i> es, all ser	<i>zae</i> , invas otypes†	sive
	Current		vious veeks	Cum	Cum	Current		evious weeks	Cum	Cum	Current		vious veeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	172	305	1,158	6,676	7,198	3,236	6,411	8,913	144,137	172,041	20	46	173	1,430	1,339
New England Connecticut	3	24 6	58 18	475 133	542 146	117 62	96 45	227 199	2,427 1,039	2,761 1,021	_	3 0	12 9	82 19	98 23
Maine§	3	3	10	57	66	—	2	7	46	57	_	0	3	8	7
Massachusetts New Hampshire	_	9 1	27 4	157 41	231 10	48	45 2	127 6	1,102 58	1,358 82	_	1 0	5 2	36 6	53 9
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	1 3	15 9	34 53	28 61	6 1	6 1	13 5	168 14	216 27	_	0 0	2 3	7 6	5 1
Mid. Atlantic	36	62	131	1,278	1,283	552	625	1,028	15,680	17,862	8	9	31	266	265
New Jersey New York (Upstate)	23	7 23	15 111	132 485	177 432	78 99	113 134	174 545	2,409 3,036	3,047 2,985	4	1 3	7 22	34 83	43 70
New York City Pennsylvania	3 10	16 15	29 29	344 317	401 273	196 179	176 224	525 394	4,727 5,508	5,303 6,527	4	1 3	6 9	42 107	51 101
E.N. Central	10	52	29 96	969	1,172	362	1,343	1,638	28,982	36,035	4	7	28	201	208
Illinois Indiana		12 0	34 0	227 N	353 N	3 141	389 157	589 311	6,459 4,136	9,211 4,471	_	2	7 20	52 45	67 31
Michigan	2	11	22	196	306	173	301	657	8,294	7,756	1	0	3	9	16
Ohio Wisconsin	10 3	16 9	36 26	381 165	322 191	28 17	344 120	685 214	7,527 2,566	11,246 3,351	1	2 1	6 4	81 14	59 35
W.N. Central	15 1	26 5	621 24	707 120	437 97	220 33	329 31	440 56	7,894 683	9,874 951	2	3 0	24 1	108 2	72 1
lowa Kansas	2	3	11	57	61	43	42	130	1,113	1,116	_	0	4	12	8
Minnesota Missouri	11	0 9	575 23	191 200	6 187	144	62 170	92 235	1,354 3,956	1,709 5,203	1	0 1	21 6	22 49	26 28
Nebraska <sup>§</sup> North Dakota	1	4 0	8 36	96 14	50 6	_	25 2	51 7	620 45	711 56	1	0 0	3 2	16 7	8 1
South Dakota	_	1	6	29	30	_	5	10	123	128	_	0	0	_	_
S. Atlantic Delaware	39 1	55 1	102 6	1,137 19	1,280 17	667 12	1,456 23	3,072 44	32,018 575	39,663 677	4	11 0	29 1	371 3	333 5
District of Columbia	_	1	5	21	32	—	47	104	1,177	1,174	_	0	1	5	1
Florida Georgia	27 4	24 11	47 28	561 226	545 280	269 2	473 254	616 561	11,530 1,589	10,849 8,202	1	3 2	10 8	97 84	91 72
Maryland <sup>§</sup> North Carolina	4 N	5 0	18 0	96 N	120 N	203	122 133	237 1,949	2,860 4,289	3,129 7,043	3	2 1	5 9	61 40	54 38
South Carolina <sup>§</sup> Virginia <sup>§</sup>	3	3	7 39	55 135	39 234	2 178	190 137	836 486	4,858 4,783	5,117 3,012	_	1	7 22	30 41	33 26
West Virginia		0	8	24	13	1/0	16	400 34	4,783	460	_	0	3	10	13
E.S. Central Alabama <sup>§</sup>	3 1	9 5	23 11	186 102	209 112	247 27	564 197	945 287	13,984 4,361	15,756 5,392	1	3 0	8 2	79 14	76 19
Kentucky	Ň	0	0	N	Ν	74	81	161	2,135	1,450	_	0	1	1	4
Mississippi Tennessee§	N 2	0 4	0 16	N 84	N 97	146	131 172	401 261	3,243 4,245	4,021 4,893	1	0 2	2 6	11 53	6 47
W.S. Central	11	7	41	107	148	718	1,019	1,355	24,046	24,253	1	2	29	65	54
Arkansas <sup>§</sup> Louisiana	6	3 1	11 14	57 13	57 43	167	78 182	138 384	2,248 3,586	2,063 5,392	_	0 0	3 2	3 3	5 3
Oklahoma Texas§	5 N	3 0	35 0	37 N	48 N	85 466	94 643	171 1,102	2,196 16,016	2,361 14,437	1	1 0	21 3	54 5	41 5
Mountain	9	31	68	560	666	69	241	333	5,226	6,733	2	5	14	183	153
Arizona Colorado	5	3 11	11 26	50 218	88 214	17	81 60	130 91	1,591 1,417	2,521 1,669	1	2	4	82 34	61 34
Idaho <sup>§</sup> Montana <sup>§</sup>	1	3 2	19 8	65 29	57 38	1	3 1	19 48	65 47	127 46	_	0 0	4 1	8 1	4
Nevada <sup>§</sup> New Mexico <sup>§</sup>	2	3 2	6 5	52 36	69 58	31 20	45 28	130 104	1,215 640	1,130 792	1	0	1 4	11 20	6 26
Utah	_	6	32	96	122	_	12	36	251	413	_	1	6	27	19
Wyoming <sup>§</sup> Pacific	— 41	1 60	3 185	14 1,257	20 1,461	 284	0 637	5 809	— 13,880	35 19,104	_	0 2	1 8	— 75	3 80
Alaska	1	1	5	34	31	6	10	24	239	257	_	0	4	11	5
California Hawaii	25	40 1	91 5	868 13	1,014 40	256	555 11	683 22	12,704 277	16,018 344	_	0 0	4 3	15 13	29 6
Oregon <sup>§</sup> Washington	2 13	9 8	19 87	199 143	184 192	22	24 42	63 97	643 17	545 1,940	_	1 0	4 3	34 2	39 1
American Samoa	_	0	0	_	_	1	0	1	3	3	_	0	0	_	_
C.N.M.I. Guam	_	0	1	_	1	_	1		37	68	_	0	1	_	_
Puerto Rico U.S. Virgin Islands	1	3 0	31 0	38	140	3	5 1	23 5	128 55	162 25	N	0 0	0 0	N	2 N
		U	0				1	3	55	20	IN	0	U	IN	IN

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Med \* Incidence data for reporting years 2007 and 2008 are provisional. \* Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I. Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

(26th Week)*				Hepat	itis (viral, a	icute), by ty	pe⁺								
		Previ	A				Prev	B					egionellos vious	sis	
Reporting area	Current week	52 we		Cum 2008	Cum 2007	Current week		eeks Max	Cum 2008	Cum 2007	Current week		veeks Max	Cum 2008	Cum 2007
United States	33	54	167	1,228	1,350	29	77	262	1,589	2,110	38	50	117	910	882
<b>New England</b> Connecticut Maine <sup>§</sup> Massachusetts New Hampshire	 	2 0 0 1 0	7 3 1 5 2	48 11 3 18 4	54 8 1 27 10	 	1 0 0 0	6 5 2 3 1	24 9 7 3 1	61 23 3 25 4	4 4 	3 1 0 0	14 4 2 3 2	36 12 1 1 4	46 5 1 21 1
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	0 0	2 1	11 1	6 2	_	0 0	3 1	3 1	5 1	_	0 0	5 2	14 4	15 3
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	3 — 1 2	6 1 1 2 1	18 6 7 6	130 22 31 41 36	211 63 35 70 43	2 1 1	9 2 2 2 3	18 7 7 5 7	188 36 37 36 79	284 85 41 65 93	13 4 9	14 1 4 2 6	37 13 15 11 21	216 17 66 21 112	243 31 70 58 84
E.N. Central Illinois Indiana Michigan Ohio Wisconsin		6 2 0 2 1 0	15 10 4 7 3 2	142 45 7 56 22 12	158 64 39 33 18	2  1 	8 1 2 2 0	17 6 8 6 7 1	161 36 18 47 57 3	237 82 20 64 71	5  5	11 1 3 4 0	35 16 7 11 17 5	184 19 17 44 100 4	198 39 15 65 69 10
W.N. Central lowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota		5 1 0 1 1 0 0	29 7 3 23 3 5 2 1	165 72 8 18 28 37  2	82 18 3 42 9 6 — 4	1  1 	2 0 0 1 0 0 0	9 2 3 5 4 1 2	48 7 6 4 27 4 	56 12 6 9 20 6 	2  2 	2 0 0 1 0 0 0	10 2 1 6 3 2 2 1	45 6 1 4 24 9 -	36 3 5 18 3 2
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	12 	9 0 3 1 1 0 0 1	22 1 0 8 5 3 9 4 5 2	169 3 	232 3 	9  4 3 1  1	16 0 6 3 2 0 1 2 0	60 3 0 12 8 6 17 6 16 30	424 6 167 61 36 48 34 49 23	522 9 — 171 73 61 70 37 74 27	8 3 4 1	8 0 3 1 2 0 0 1	28 2 10 3 6 7 2 6 3	184 5 6 72 12 43 11 5 26 4	180 6 20 31 21 8 18 3
E.S. Central Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	 	2 0 0 0 1	9 4 2 1 6	38 4 14 2 18	47 8 9 6 24	2 1 1	7 2 2 0 2	13 5 7 3 8	164 46 48 16 54	171 62 29 19 61	$\begin{array}{c} 3\\ -1\\ -2 \end{array}$	2 0 1 0 1	7 1 3 1 4	55 5 27 1 22	44 5 20 — 19
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	 	5 0 0 5	51 1 3 7 49	110 3 4 99	98 6 15 3 74	6  2 4	17 1 1 2 11	134 3 8 37 110	328 17 20 45 246	416 38 54 24 300	 	2 0 0 0 2	23 2 2 3 18	31 5  3 23	43 6 2 1 34
Mountain Arizona Colorado Idaho <sup>§</sup> Montana <sup>§</sup> Newada <sup>§</sup> New Mexico <sup>§</sup> Utah Wyoming <sup>§</sup>	3 2 1 — —	4 2 0 0 0 0 0 0 0	10 6 3 2 1 3 2 1 3 2 1	105 47 22 15  3 14 2 2	130 93 17 2 4 7 3 2 2	2 2 — — —	3 1 0 0 1 0 0 0 0	7 4 3 2 1 3 2 5 1	83 19 12 4  20 7 19 2	116 50 18 6  27 9 4 2		2 1 0 0 0 0 0 0 0	6 5 2 1 1 2 1 3 0	39 11 3 2 6 3 12	38 9 4 1 3 4 5 3
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	15 — 14 — 1	13 0 11 0 1 1	51 1 42 2 3 7	321 2 262 4 20 33	338 2 301 5 13 17	5 1 3 1	9 0 6 0 1	30 2 19 2 4 9	169 8 117 3 22 19	247 4 183 5 33 22	3 2 	4 0 3 0 0 0	18 1 14 1 2 3	120 1 93 4 8 14	54 — 43 1 3 7
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	  _1	0 0 0 0	0 0 4 0	 9	  41	 	0 0 1 0	0  5 0	  	14  40 	N 	0  0 0 0	0 0 1 0	N 1	N 3

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. \* Data for acute hepatitis C, viral are available in Table I. \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

728

(26th Week)*		1	vme disea	250			n	Ialaria			Men		cal disea	se, invasi	ve†
		Prev	,	136				vious					vious	103	
	Current		eeks	Cum	Cum	Current		eeks	Cum	Cum	Current		veeks	Cum	Cum
Reporting area	284	Med 276	Max 1,627	<b>2008</b> 4,497	<b>2007</b> 8,881	<b>week</b> 15	<b>Med</b> 22	<b>Max</b> 136	<b>2008</b> 369	<b>2007</b> 535	<b>week</b> 12	<b>Med</b> 19	<b>Max</b> 52	<b>2008</b> 620	<b>2007</b> 621
New England	4	270	675	287	2,898		1	35	10	26		0	3	16	32
Connecticut	_	6	280	—	1,369	_	0	27	5	1	—	0	1	1	5
Maine <sup>§</sup> Massachusetts	_	6 6	61 280	70 28	40 1,096	_	0 0	2 3	2	3 17	_	0 0	1 3	3 12	5 15
New Hampshire Rhode Island <sup>§</sup>	_	9 0	96 77	157	348 1	_	0 0	4 8	1	5	_	0 0	0 1	_	3 1
Vermont <sup>§</sup>	4	2	13	32	44	_	0	2	2	_	_	0	1	_	3
Mid. Atlantic	219	164	662	2,675	3,279	_	6	18	82	148	_	2	6	68	72
New Jersey New York (Upstate)	162	26 63	220 453	322 897	1,393 652	_	0 1	7 8	13	31 28	_	0 0	1 3	3 20	10 21
New York City Pennsylvania	57	2 54	27 293	4 1,452	139 1,095	_	3 1	9 4	56 13	77 12	_	0 1	2 5	13 32	16 25
E.N. Central	1	6	233	39	865	_	2	7	52	72	1	3	9	94	94
Illinois	_	0	16	2	61	_	1	6	23	36	_	1	3	28	38
Indiana Michigan	_	0 0	7 5	2 11	13 13	_	0 0	1 2	2 8	5 9	_	0 0	4 2	16 13	13 16
Ohio Wisconsin	1	0 4	4 201	10 14	5 773	_	0 0	3 3	16 3	12 10	1	1 0	4 2	28 9	22 5
Wisconsin W.N. Central	_	3	740	199	142	_	1	8	22	10	_	2	8	59	40
Iowa	_	1	8	13	63	—	0	1	2	2	_	0	3	11	9
Kansas Minnesota	_	0 0	1 731	1 168	8 63	_	0 0	1 8	3 6	1 11	_	0 0	1 7	1 16	2 10
Missouri Nebraska <sup>§</sup>	_	0 0	3 1	12 3	5 3	_	0 0	4 2	6 5	2 2	_	0 0	3 2	20 9	12 2
North Dakota	—	0	9	1	—	_	0	2	_	—	—	0	1	1	2
South Dakota		0	1	1	4 505		0	0		1		0	1	1	3
S. Atlantic Delaware	52 11	62 12	221 34	1,123 343	1,595 320	10	5 0	15 1	105 1	114 3	5	3 0	7 1	91 1	92 1
District of Columbia Florida	2 1	2 1	8 4	53 18	60 2	_	0 1	1 7	24	2 22	1	0 1	0 5	32	31
Georgia	_	0	3	3	4	_	1	3	20	16	—	0	3	12	10
Maryland <sup>§</sup> North Carolina	20	30 0	136 8	529 2	893 19	7	1 0	5 2	28 11	33 12	3	0 0	2 4	10 8	17 11
South Carolina <sup>§</sup> Virginia <sup>§</sup>	 18	0 13	4 68	7 160	11 280	3	0 1	1 7	3 18	4 22	1	0 0	3 2	13 13	9 13
West Virginia		0	9	8	6		0	1			_	0	1	2	
E.S. Central	_	1 0	7 3	19 8	27	_	0 0	3 1	7 3	17 2	1 1	1 0	6 2	36 4	33 7
Alabama <sup>§</sup> Kentucky	_	0	3	o 1	9	_	0	1	3	2 4	—	0	2	7	6
Mississippi Tennessee§	_	0	1 5	10	 18	_	0 0	1 2	1	1 10	_	0 0	2 3	9 16	8 12
W.S. Central	_	1	11	24	33	_	1	64	16	43	1	2	13	64	64
Arkansas <sup>§</sup> Louisiana	_	0 0	1 0	_	2	_	0 0	1 1	_	 13	_	0 0	1 3	6 12	7 21
Oklahoma	_	0	1	_	—	_	0	4	2	3	1	0	5	10	11
Texas§	_	1	10	24	31	_	1	60	14	27	_	1	7	36	25
<b>Mountain</b> Arizona	1	0 0	3 1	10 2	13	_	1 0	5 1	12 5	29 5	_	1 0	4 2	33 5	44 11
Colorado Idaho§	1	0 0	1 2	2 4	4	_	0 0	2 2	3	11	_	0 0	2 2	8 2	14 4
Montana§	_	0	2	1	1	—	0	1	_	2	_	0	1	4	1
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	0	2 2	1	6 1	_	0	3 1	4	1 1	_	0 0	2 1	6 4	3 2
Utah Wyoming <sup>§</sup>	—	0 0	1 1	_	1	_	0 0	1 0	_	9	—	0 0	2 1	2 2	7 2
Pacific	7	4	8	121	 29	5	3	10	63	67	4	4	17	2 159	2 150
Alaska	—	0	2	1	2	1	0	2	3	2	_	0	2	3	1
California Hawaii	4 N	3 0	8 0	103 N	25 N	4	2 0	8 1	50 2	44 2	3	3 0	17 2	118 1	110 4
Oregon <sup>§</sup> Washington	3	0 0	3 7	17	2	_	0 0	2 3	4 4	12 7	1	0 0	3 5	21 16	21 14
American Samoa C.N.M.I.	Ν	0	0	Ν	Ν	_	0	0	- -	_	_	0	0		
Guam	_	0	0	_	_	_	0	1	1	_	—	0	0	_	_
Puerto Rico U.S. Virgin Islands	N N	0 0	0 0	N N	N N		0 0	1 0	1	1		0 0	1 0	2	5

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. \* Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

	ek)*Pertussis						Rab	ies, anim	al		Ro	ocky Mo	untain sp	otted feve	er
	0	Prev		0	0	0		/ious	0	<u></u>	0		vious	0	0
Reporting area	Current week	<u>52 w</u> Med	<u>eeks</u> Max	Cum 2008	Cum 2007	Current week	52 v Med	/eeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007
United States	84	153	845	3,161	4,509	51	89	177	1,916	2,867	57	29	195	374	699
New England	1	24	49	271	688	3	8	20	164	271	_	0	2	_	4
Connecticut Maine <sup>†</sup>	_	0 1	5 5	 16	35 37	3	4 1	17 5	92 22	114 39	N	0 0	0 0	N	N
Massachusetts New Hampshire	—	17 0	35 5	224 9	555 36	N	0 1	0 4	N 17	N 23	_	0 0	2 1	—	_4
Rhode Island <sup>†</sup>	1	0	25	17	4	Ν	0	0	N	N	—	0	0	_	_
Vermont <sup>†</sup> Mid. Atlantic	7	0 22	6 43	5 361	21 612	— 12	2 18	6 29	33 407	95 478	1	0 1	0 5	 27	
New Jersey	_	2	9	3	100	_	0	0	_	_		0	2	2	14
New York (Upstate) New York City	4	7 2	23 7	140 34	296 68	12	9 0	20 2	208 10	224 27	_	0 0	2 2	6 10	3 14
Pennsylvania	3	8	23	184	148	—	8	18	189	227	1	Ő	2	9	8
E.N. Central Illinois	11	18 3	189 8	625 58	850 91	4 N	3 0	43 0	42 N	47 N	3	0 0	3 3	9 1	25 17
Indiana		0	12	21	26	_	0	1	1	6	_	0	1	1	3
Michigan Ohio	1 6	4 7	16 176	69 453	131 401	4	1 1	32 11	24 17	26 15	3	0 0	1 2	1 6	2 3
Wisconsin	4	0	13	24	201	N	0	0	N	N	_	0	1	_	_
W.N. Central Iowa	32	11 1	142 8	302 30	323 100	2	4 0	13 3	59 9	135 15	9	4 0	34 5	96	129 7
Kansas		1	5	24	54	—	0	7	_	74	_	0	2	—	6
Minnesota Missouri	26 2	0 2	131 18	95 113	59 42	2	0 0	6 3	19 16	10 15	7	0 3	4 25	92	1 108
Nebraska <sup>†</sup> North Dakota	4	1 0	12 5	35 1	20 3	_	0 0	0 8	 13	 11	2	0 0	2 0	4	5
South Dakota	_	0	2	4	45	_	0	2	2	10	_	0	1	_	2
S. Atlantic Delaware	10	13 0	50 2	308 5	490 5	25	40 0	73 0	1,025	1,141	18	7 0	109 2	100 5	325 9
District of Columbia	_	0	1	2	7	_	0	0	_	_	_	0	2	2	2
Florida Georgia	7	3 0	9 3	90 16	118 24	_	0 6	25 37	66 166	128 119	_	0 0	3 6	3 10	3 31
Maryland <sup>†</sup>	—	1	6	32	65	_	9	18	199	198	4	1	6	19	25
North Carolina South Carolina <sup>†</sup>	3	0 1	38 22	76 35	170 44	6	9 0	16 0	241	250 46	9 1	0 0	96 5	23 13	182 28
Virginia† West Virginia	_	2 0	11 12	48 4	48 9	19	12 0	27 11	297 56	362 38	4	1 0	8 3	24 1	44 1
E.S. Central	5	7	31	108	148	3	2	7	67	77	5	4	16	61	124
Alabama <sup>†</sup> Kentucky	3	1 0	6 4	19 21	38 12	3	0 0	0 3	17	 10	3	1 0	10 2	19	28 4
Mississippi	_	3	29	42	46		0	1	2	_	_	0	3	3	7
Tennessee <sup>†</sup> W.S. Central	2 10	1 19	4 194	26 365	52 465	1	2 10	6 40	48 53	67 582	2 21	1 2	10	39 70	85
Arkansas <sup>†</sup>	2	1	17	31	97	1	1	6	36 36	14	21	0	153 15	8	32 1
Louisiana Oklahoma	1	0	2 26	3 13	12 2	_	0 0	2 32	16	3 45	 14	0 0	2 132	2 54	1 21
Texas <sup>†</sup>	7	18	175	318	354	—	8	34	1	520	_	1	8	6	9
<b>Mountain</b> Arizona	7 3	19 3	37 10	431 103	557 146	1 N	2 0	8 0	28 N	20 N	_	0 0	2 2	9 5	18 3
Colorado	4	4	13	72	143	_	0	0	_	_	—	0	2	_	2
Idaho† Montana†	_	0 0	4 11	18 56	22 30	_	0 0	4 3	1	4	_	0 0	1 1	1	2
Nevada† New Mexico†	_	0 1	7 7	17 22	22 27	1	0 0	2 3	3 17	2 5	_	0 0	0 1	1	3
Utah	_	6	27	138	152	_	0	2	1	4	_	0	0	—	_
Wyoming <sup>†</sup>	_	0	2	5	15	_	0	4	6	5	_	0	2	2	9
<b>Pacific</b> Alaska	1 1	18 1	303 29	390 43	376 23	_	4 0	10 4	71 12	116 36	N	0 0	1 0	2 N	3 N
California Hawaii	—	8 0	129 2	156 4	228 10	_	3	8 0	57	79	N	0	1 0	1 N	1 N
Oregon <sup>†</sup>	_	2	14	71	50	_	0	3	2	1	—	0	1	1	2
Washington	—	5	169	116	65		0	0	_	_	N	0	0	N	N
American Samoa C.N.M.I.	_	0	0	_	_		0	0	N	N		0	0	N	N
Guam Puerto Rico	_	0 0	0 0	_	_	2	0 1	0 5	 29	 21	N N	0 0	0 0	N N	N N
U.S. Virgin Islands	_	0	0	_	_	N	0	0	29 N	N	N	0	0	N	N

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(26th Week)*	Salmonellosis						oxin-pro	ducing <i>E</i>	E. coli (ST	EC)†			Shigellos	is	
			vious					/ious					vious		
Reporting area	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007
United States	614	809	2,109	14,981	17,767	47	76	244	1,598	1,487	239	395	1,235	7,981	7,201
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire Rhode Island <sup>§</sup>	1 — — 1	20 0 2 14 3 1	222 193 14 60 10 13	591 193 60 221 46 37	1,257 431 54 623 66 46	 	4 0 2 0 0	19 15 4 9 5 3	68 15 4 24 13 7	150 71 17 45 9 3	 	3 0 2 0 0	22 20 1 8 1 9	66 20 34 1 7	143 44 12 75 4 6
Vermont <sup>§</sup> Mid. Atlantic New Jersey	71	1 87 16	6 212 48	34 1,846 283	37 2,463 531	2	0 8 1	3 194 7	5 340 6	5 173 45	15	0 26 6	1 78 16	1 933 188	2 257 57
New York (Upstate) New York City Pennsylvania	38 4 29	25 22 30	48 73 48 83	530 449 584	585 536 811	1 1	4 1 2	190 5 11	279 21 34	43 55 19 54	14 1	7 8 2	36 35 65	321 369 55	50 108 42
<b>E.N. Central</b> Illinois Indiana Michigan Ohio Wisconsin	41 — 7 33 1	88 24 9 16 26 14	263 187 34 43 65 37	1,751 454 183 296 593 225	2,556 895 245 399 555 462	5  - 1 3 1	10 1 2 2 3	36 13 12 10 17 16	176 18 15 36 67 40	189 31 17 31 53 57	44 — — 42 2	73 17 10 1 21 11	145 37 83 7 104 39	1,425 392 365 31 433 204	926 262 29 27 302 306
W.N. Central Iowa	32 2 5	52 9 6	95 18 21	1,098 179 126	1,203 207 191	10 1	13 2	38 13 4	249 48	232 50 23	_2	23 2 0	57 9 2	431 69 8	1,030 38
Kansas Minnesota Missouri Nebraska <sup>s</sup> North Dakota South Dakota	5 14 8 3	13 15 5 0 2	21 39 29 13 35 11	126 285 316 115 22 55	285 317 103 16 84	6 3 —	1 3 2 0 1	15 12 6 20 5	18 60 74 31 2 16	23 71 42 25 5 16	1 1 1	0 4 9 0 0 2	11 37 3 15 31	0 112 135 — 32 75	16 122 803 12 3 36
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	240 2 	236 3 1 92 37 15 19 20 19 4	442 8 4 181 86 44 228 52 49 25	3,907 62 21 1,832 627 286 376 329 304 70	4,189 60 29 1,704 657 311 563 331 474 60	12 	12 0 2 1 2 1 0 2 0	40 2 1 18 6 5 24 3 9 3	272 7 5 82 25 45 28 17 49 14	254 10 — 65 28 36 37 5 70 3	51 — 14 23 1 4 6 3 —	75 0 26 27 2 1 8 4 0	149 2 3 75 47 7 12 32 14 61	1,617 7 5 466 635 26 51 342 78 7	2,370 4 7 1,323 850 47 33 43 62 1
E.S. Central Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	37 9 13 — 15	54 15 9 14 16	144 50 23 57 34	978 272 163 252 291	1,153 324 212 277 340	1  1	5 1 1 0 2	26 19 12 1 12	108 36 17 3 52	65 13 18 3 31	11 2 3 - 6	52 13 11 18 11	178 43 35 112 32	982 222 174 221 365	690 260 136 201 93
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	48 23 1 24	105 13 9 11 56	893 50 44 72 793	1,430 216 80 247 887	1,496 220 314 170 792	1  _1	5 1 0 3	25 4 1 14 11	87 21 — 14 52	106 20 6 12 68	67 2 1 3 61	55 2 5 3 39	756 19 22 32 710	1,617 194 78 49 1,296	902 45 271 47 539
Mountain Arizona Colorado Idaho <sup>§</sup> Montana <sup>§</sup> Nevada <sup>§</sup> New Mexico <sup>§</sup> Utah Wyoming <sup>§</sup>	40 16 16 1 7 	56 17 11 3 1 5 6 5 1	83 40 44 10 10 12 26 17 5	1,308 384 388 74 36 100 175 129 22	1,124 366 260 53 45 121 115 122 42	3 1 2 	8 1 2 0 0 0 0 1 0	42 8 17 16 3 3 5 9 1	166 27 45 36 13 11 16 14 4	169 49 29 31  14 22 24 	31 14 — 13 —	18 9 2 0 2 1 1 0	40 30 6 2 1 10 6 5 2	332 151 42 5 1 103 17 10 3	354 177 49 6 13 15 56 13 25
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	104 1 70 1 3 29	110 1 78 5 6 12	399 5 286 14 15 103	2,072 24 1,522 100 161 265	2,326 46 1,747 116 154 263	13 7 2 4	9 0 5 0 1	40 1 34 5 11 13	132 3 79 5 13 32	149 — 86 14 17 32	18  17  1	30 0 26 1 1 2	79 1 61 43 6 20	578 	529 7 427 15 33 47
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	  _1	0  12 0	1 2 55 0	1 6 152	 11 364	 	0 0 0 0	0 0 1 0	 2	 	 	0 0 0 0	1 3 2 0	1  	3 10 18

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Me \* Incidence data for reporting years 2007 and 2008 are provisional. \* Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

	Stre	ptococca	disease.	invasive, g	A quo	Streptococcus pneumoniae, invasive disease, nondrug resis Age <5 years	tant <sup>†</sup>
	Current	Prev	ious eeks	Cum	Cum	Previous Current <u>52 weeks</u> Cum Cum	
Reporting area	week	Med	Max	2008	2007	week Med Max 2008 2007	
United States	49	99	258	3,182	3,245	8 35 166 935 1,004	
New England Connecticut	_	6 0	31 28	207 71	255 70	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Maines	_	0	20	16	18	- 0 1 1 1	
Massachusetts	—	2	7	83	130	-153054	
New Hampshire Rhode Island <sup>§</sup>	_	0 0	2 6	16 12	20 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Vermont§	—	Ő	2	9	15	- 0 1 1 2	
Mid. Atlantic	9	16	43	656	641	<u> </u>	
New Jersey New York (Upstate)	5	3 6	9 18	101 228	120 191	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
New York City		3	10	116	159	- 1 12 33 87	
Pennsylvania	4	5	16	211	171	N 0 0 N N	
E.N. Central	10	17	59	655	667	- 6 23 188 184	
Illinois Indiana	_	5 2	16 11	175 87	203 69	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Michigan	_	3	10	85	140	- 1 5 42 54	
Ohio	5	4	15	187	163	-1 5 35 37	
Wisconsin	5	1	38	121	92	- 1 9 45 37	
W.N. Central Iowa	_	5 0	39 0	256	218	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Kansas	_	0	6	33	24	— 0 3 13 —	
Minnesota	—	0	35	116	107	- 0 13 28 33	
Missouri Nebraska <sup>§</sup>	_	2 0	10 3	62 24	56 15	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
North Dakota	_	0	5	9	10	— 0 2 4 1	
South Dakota	—	0	2	12	6	— 0 1 5 —	
S. Atlantic	14	21	51	626	742	3 6 13 147 172	
Delaware District of Columbia	_	0 0	2 2	6 12	5 15	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Florida	3	6	11	148	170	2 1 4 41 36	
Georgia Maryland§	4 1	4 4	10 9	127 113	148 130	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
North Carolina	3	4	22	86	94	N 0 0 N N	
South Carolina <sup>§</sup>		1	5	35	71	<u> </u>	
Virginia <sup>§</sup> West Virginia	3	3 0	12 3	80 19	91 18	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
E.S. Central	1	4	13	103	118	— 2 11 62 53	
Alabama <sup>§</sup>	Ň	0	0	N	N	N 0 0 N N	
Kentucky		1	3	20	30	N 0 0 N N	
Mississippi Tennessee <sup>§</sup>	N 1	0 3	0 13	N 83	N 88	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
W.S. Central	8	8	84	257	185	4 5 66 142 135	
Arkansas§	<u> </u>	0	2	257	15	— 0 2 5 9	
Louisiana		0	1	3	13	- 0 2 2 24	
Oklahoma Texas <sup>§</sup>	3 5	1 5	19 64	68 182	43 114	1 1 7 46 30 3 3 58 89 72	
Mountain	6	11	22	349	343	— 5 12 151 130	
Arizona	4	4	9	126	127	- 2 8 77 64	
Colorado Idaho§	1	3 0	8 2	98 11	88 6	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Idanos Montanas	1 N	0	2	11 N	6 N	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Nevada§	_	0	2	6	3	N 0 0 N N	
New Mexico§ Utah	_	2 1	7 5	66 37	61 53	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Wyoming <sup>§</sup>	_	0	2	5	5	- 0 1 1 $-$	
Pacific	1	3	10	73	76	— 0 2 10 9	
Alaska	—	0	3	20	15	N 0 0 N N	
California Hawaii	1	0 2	0 10	53	61	N 0 0 N N 0 2 10 9	
Oregon <sup>§</sup>	Ν	0	0	N	N	N 0 0 N N	
Washington	Ν	0	0	Ν	Ν	N 0 0 N N	
American Samoa	8	0	12	30	4	N 0 0 N N	
C.N.M.I. Guam	_	0	3	_	5	0	
Puerto Rico	N	0	3 0	N	ь N	<u> </u>	
U.S. Virgin Islands	_	Õ	Ō	_	_	N 0 0 N N	

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notii

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available § (NNDSS event code 11717). § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Image: Second Se		Streptococcus pneumoniae, invasive disease, drug resistant <sup>†</sup>														
Current         52 weeks         Cum         Current         52 weeks         Cum         Cum         Current         52 weeks         Cum         Cum         Current         52 weeks         Current         52 wee			Deer	All ages	;					S		Syp			d second	ary
Reporting area         week         Med         Max         Zoop         Yeek         Zoop         Yeek         Zoop         Yeek         Zoop         Yeek         Zoop         Yeek         Zoop         Yeek         Yeek <th< th=""><th></th><th>Current</th><th></th><th></th><th>Cum</th><th>Cum</th><th>Current</th><th></th><th></th><th>Cum</th><th>Cum</th><th>Current</th><th></th><th></th><th>Cum</th><th>Cum</th></th<>		Current			Cum	Cum	Current			Cum	Cum	Current			Cum	Cum
New England         -         1         41         28         62         -         0         8         5         12         5         6         14         14           Maine         -         0         37         -         1         1         1         -         0         0         1 <th1< th=""> <th1< th=""></th1<></th1<>	Reporting area							-								
Connection: 0 37 51 0 7 4 0 0 0 10 14 Mande 0 0 2 11 7 0 0 1 1 _ 2 0 0 1 2 4 0 0 1 2 4 0 0 1 0 14 Mean Ampehine 0 0 0 0 0 0 1 2 3 0 0 3 2 17 Vermont _ 0 0 3 7 13 0 0 1 2 2 3 0 0 3 2 17 Vermont 0 0 3 7 13 0 0 1 2 9 0 0 1 2 2 2 0 0 5 1 8 2 New Verset New New	United States	18	49	262	1,497	1,502	2	9	43	238	300	112	230	351	5,395	5,184
Maine <sup>1</sup> -         0         2         11         7         -         0         1         1         1         -         0         2         5         4         11         11         70           Rinde likand <sup>10</sup> -         0         0         -         13         -         0         0         -         2         1         11         -         0         3         6         11         70           Rinde likand <sup>10</sup> -         0         2         10         11         -         0         2         2         -         0         3         6         11         2         4         10         99         970         Now Vortey         -         0         0         -         -         -         0         2         4         10         98         970         10         11         14         5         12         14         10         98         10         10         11         14         15         12         14         14         14         14         14         14         14         14         14         14         14         14         14         14         10		_					_									
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		_														
Rhode Isinghof         -         0         3         7         13         -         0         1         2         3         -         0         3         2         17           Mid. Alamic         1         3         10         128         90         -         0         2         2         -         0         5         18         2           Mid. Alamic         1         3         10         128         90         -         0         2         11         14         5         88         66         77         70         2         4         68         75         13         68         96         16         5         12         33         68         468           ENCentral         6         13         50         428         412         -         0         16         12         24         -         6         18         31         43         41         42         13         41         14         13         14         14         14         13         14         14         13         14         14         13         14         14         13         14         14         14         1		—				—					2					
Mid. Annic         1         3         10         128         90          0         2         15         22         19         32         45         866         777           New York (Dpstab)          1         4         31         29          0         2         4         8         2         3         3         68         98           New York (Dpstab)          1         1         15         55         428         11         16         12         146         15         14         14         13         14         <	Rhode Island <sup>§</sup>	_	0	3	7		_	0	1	2			0	3	2	17
$\begin{split} \begin{array}{cccccccccccccccccccccccccccccccccccc$		—														
New York (Lipstate)         -         1         4         31         29         -         0         2         4         8         2         3         13         680         683         4438           Pornsylvania         1         1         8         58         61         -         0         2         11         14         15         55         12         1443         347           Binnes         -         2         15         65         75         21         24         -         0         1         1         1         5         2         17         107 </td <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		1					_									
Pennsynamia 1 1 1 8 58 61 — 0 2 11 14 5 5 5 12 145 134 11 Binosi — 2 5 56 75 — 0 16 77 68 9 9 16 31 413 427 Hinosia — 2 7 1 1 — 0 11 16 12 1 2 6 6 88 224 Michigan — 0 2 7 1 1 — 0 11 1 1 5 2 17 107 56 Onio 6 7 10 2 7 1 1 — 0 0 7 — 2 4 8 31 31 43 427 Michigan — 0 0 7 — 2 7 1 1 — 0 0 7 — 2 4 8 31 43 42 7 Michigan — 0 0 7 — 2 7 1 1 — 0 0 7 — 2 4 8 11 5 194 153 Wisconsin — 0 10 7 — 2 7 1 0 0 7 — 2 4 8 11 5 194 153 Wisconsin — 0 10 7 — 2 7 0 1 7 — 0 0 7 — 2 4 8 11 5 194 153 Michigan — 0 10 7 — 2 7 0 1 2 — 1 4 8 11 1 1 1 1 5 2 1 7 10 7 56 Kanasa — 1 1 8 59 39 — 0 1 2 - 4 — 0 1 4 4 14 144 144 144 144 144 144 144	New York (Úpstate)		1	4				0	2	4		2	3	13	68	68
Indiana         -         3         28         132         94         -         0         11         16         12         1         2         6         6         7         1         -         0         1         1         1         1         5         2         17         107         56           Ohio         -         -         -         1         4         33         3         4         14         14         38           Wisconsin         -         0         0         -         -         -         -         1         4         23         32           Wisconsin         -         0         0         -         -         -         0         0         -         -         -         0         0         1         4         4         1         4         4         0         3         3         4         1         3         3         -         1         3         3         4         1         4         4         0         0         -         -         -         0         1         -         1         3         3         1         1         1         1 <td>E.N. Central</td> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>9</td> <td></td> <td></td> <td></td> <td></td>	E.N. Central	6										9				
		_					_									
Wisconsin         -         0         0         -         -         -         -         1         4         23         32           WNN Central         1         2         106         102         -         0         0         -         -         0         0         -         -         0         0         -         -         0         5         1         0         0         -         -         0         0         1         2         -         0         0         1         2         -         0         0         1         2         -         4         5         10         13         3           Nebreshring         -         0         0         -         -         -         0         1         2         -         4         10         103         142         21         48         16         98         16         10         13         142         21         48         61         11         16         13         44         42         37         35         11         10         103         144         21         11         16         14         14         23         11	Michigan		0	2	7	1		0	1	1	1	5	2	17	107	56
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		6					_					3				
Kanasas         -         1         5         43         58         -         0         1         2         4         -         0         5         19         8           Minnesota         1         1         8         59         39         -         0         1         2         -         4         5         10         121         97           North Dakota         -         0         0         -         -         -         0         1         3         3           S.uth Dakota         -         0         2         -         6         0         1         3         4         -         0         3         -         3           S.Atlantic         7         20         42         612         648         -         4         10         103         142         21         4         44         34         442         370           Delaware         -         0         3         12         12         -         0         0         1         -         1         1         5         13         318         163           Maryland*         -         0         3	W.N. Central	1					_	0	9			4		15	194	153
Missouri       1       1       8       59       39        0       1       2        4       5       10       121       97         North Dakota        0       0          0       0         0       1       3       3       3         South Dakota        0       0         0       0       1         0       1         0       1        0       1        0       1       1       1        0       1       1       0       0       1       1        0       1       1        0       1       1        0       1       1        0       1       1        0       1 <t< td=""><td>Kansas</td><td>_</td><td>1</td><td>5</td><td></td><td>58</td><td>_</td><td>0</td><td>1</td><td></td><td>4</td><td>_</td><td>0</td><td>5</td><td>19</td><td>8</td></t<>	Kansas	_	1	5		58	_	0	1		4	_	0	5	19	8
Nebraka <sup>i</sup> -         0         0         -         2         -         0         0         -         0         1         -         -         -         -         -         0         1         -         -         -         0         1         -         -         0         1         -         -         0         1         -         0         1         1         1         1         1         1         1         1         1         2         1         1         0         0         0         0         0         0         1         1         1         1         1         1         1         1 <th1< th="">         1         <th1< td=""><td></td><td>1</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th1<></th1<>		1					_									
South Dakota         -         0         2         -         6         -         0         1         3         4         -         0         3         -         3           S.Milanic         7         20         42         612         648         -         4         10         103         142         21         48         215         1,120         1,117         6         98           Florida         -         0         3         12         12         -         0         0         -         1         -         0         1         -         -         6         66         74         10         18         34         442         370           Georgia         3         7         19         202         23         -         -         0         0         N         N         0         0         N         N         N         0         0         N         N         N         0         0         N         N         N         0         0         N         N         N         0         0         N         N         N         0         0         N         N         N	Nebraska§	_	0	0	_	2	_	0		_	_	_	0	1		3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		_					_								_	
District of Columbia         -         0         3         12         12         -         0         -         1         -         2         1         50         98           Georgia         3         7         19         202         235         -         1         6         30         58         -         10         175         138         164           Naryland <sup>4</sup> -         0         2         3         1         -         0         1         -         -         6         61         18         162         175           South Carolina         N         0         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N         N         N         0         N <td></td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>103</td> <td>142</td> <td></td> <td></td> <td></td> <td></td> <td></td>		7								103	142					
		_														
	Florida		11	26	337	353	_	2	6		74	10	18	34	442	370
South Carolina <sup>8</sup> —         0         0         —         —         —         0         0         —         —         2         5         43         500           West Virginia         —         1         7         56         42         —         0         2         6         8         —         0         0         —         6           E.S. Central         3         4         12         158         88         2         1         4         29         17         9         20         31         519         396           Kentucky         2         1         4         43         17         —         0         2         8         2         1         1         7         45         34           Mississippi         —         0         0         —         —         -         2         1         3         21         15         4         8         14         183         147           Ws.Central         —         1         5         26         50         —         0         2         19         21         10         72         57         10         34         18		3					_									
Virginia <sup>3</sup> N       0       0       N       N       3       5       17       133       103         West Virginia       -       1       7       56       42       -       0       0       N       N       3       5       17       133       103         BES. Central       3       4       12       158       88       2       1       4       29       17       9       20       31       519       396         Alabama <sup>3</sup> N       0       0       N       N       N       0       0       N       4       8       17       222       158       88       2       1       4       8       17       223       158         Kentucky       2       1       4       3       12       13       211       15       48       14       183       177       25       39       62       982       854         Missispipi       -       0       0       N       N       0       0       N       -       1       5       62       982       854         Ubilisiona       -       0       0       N       N																
E.S. Central         3         4         12         158         88         2         1         4         29         17         9         20         31         519         396           Alabama <sup>i</sup> N         0         0         N         N         N         0         0         N         N         N         4         8         17         222         158           Kentucky         2         1         4         43         17         -         0         0         -         -         -         2         15         69         57           Tennessee <sup>6</sup> 1         3         12         115         71         2         1         3         21         15         4         8         14         183         147           WS. Central         -         0         2         9         1         -         0         1         2         2         19         2         100         72         57           Louisiana         -         0         0         N         N         0         0         N         16         26         49         681         540           Mo	Virginia <sup>§</sup>		0	0	Ν	Ν		0	0	Ν	Ν		5	17		103
Alabama <sup>§</sup> N       0       0       N       N       4       8       17       222       158         Kentucky       2       1       4       43       17       -       0       0       -       -       -       0       0       -       -       -       2       1       1       7       45       34         Mississippi       -       0       0       -       -       -       0       0       -       -       2       1       5       69       57         Tennessee <sup>6</sup> 1       3       12       115       71       2       1       3       21       15       4       8       14       183       147         WS. Central       -       0       2       9       1       -       0       2       7       7       35       39       62       982       853         Louisiana       -       0       N       N       0       0       N       N       0       1       1       5       16       40       34         Mountain       -       1       6       17       26       -       0       0 </td <td>0</td> <td></td>	0															
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$																
Tennessee <sup>5</sup> 1       3       12       115       71       2       1       3       21       15       4       8       14       183       147         W.S. Central       -       1       5       26       50       -       0       2       7       7       35       39       62       982       854         Arkansas <sup>5</sup> -       0       2       1       7       7       35       39       62       982       253         Louisiana       -       0       5       17       49       -       0       2       5       5       -       10       22       189       223         Oklahoma       N       0       N       N       N       0       0       -       -       1       6       14       14       143       147         Mountain       -       0       0       -       -       -       0       0       -       -       1       1       5       40       81       540       541       540       541       540       541       540       53       107       53       233       107       53       233		2										1				34
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1										4				
Louisiana         -         0         5         17         49         -         0         2         5         5         -         10         22         189         223           Oklahoma         N         0         0         N         N         N         0         0         N         N         -         1         5         40         34           Texas <sup>8</sup> -         0         0         -         -         -         1         5         40         34           Mountain         -         1         6         17         26         -         0         2         4         8         3         9         29         186         206           Arizona         -         0         0         -         -         -         0         0         -         1		_					_									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		_					_									
Mountain         -         1         6         17         26         -         0         2         4         8         3         9         29         186         206           Arizona         -         0         0         -         -         -         0         0         -         -         -         5         21         78         107           Colorado         -         0         0         -         -         -         0         0         -         -         -         -         -         -         -         -         -         -         1         <	Oklahoma	Ν	0	0	Ν	N	Ν	0	0	N			1	5	40	34
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		_					_									
Idaho <sup>§</sup> N       0       0       N       N       N       0       0       N       N        0       1       1       1         Montana <sup>§</sup> -       0       0       -       -       0       0       -       -       0       3       -       1	Arizona	_	0	0			_	0	0	_			5	21	78	107
Montana <sup>§</sup> -       0       0       -       -       -       0       0       -       -       -       0       3       -       1         Nevada <sup>§</sup> N       0       0       N       N       N       0       0       N       N       2       2       6       37       44         New Mexico <sup>§</sup> -       0       1       1       -       -       0       0       -       -       1       1       3       17       22         Utah       -       0       6       16       15       -       0       2       4       7       -       0       2       -       7         Wyoming <sup>§</sup> -       0       1       -       11       -       0       1       -       1       -       0       1       -       1       -       0       1       -       1       1       2       7       40       71       971       1,128         Alaska       N       0       0       N       N       N       0       0       N       N       3       36       59       865       1,049		N			N	N	N			N	N	_				
New Mexico <sup>§</sup> -       0       1       1       -       -       0       0       -       -       1       1       3       17       22         Utah       -       0       6       16       15       -       0       2       4       7       -       0       2       -       7         Wyoming <sup>§</sup> -       0       1       -       11       -       0       1       -       0       2       4       7       -       0       2       -       7         Wyoming <sup>§</sup> -       0       1       -       0       1       -       0       1       -       0       1       -       0       1       -       7       40       71       971       1,128         Alaska       N       0       0       N       N       N       0       0       N       N       0       0       N       N       0       0       N       N       0       0       N       N       0       0       N       N       0       0       N       N       0       0       N       N       0       0       N       N	Montana§	_	0	0	_	_	_	0	0	_	_		0	3	_	1
Utah        0       6       16       15        0       2       4       7        0       2        7         Wyoming <sup>§</sup> 0       1        11        0       1        0       1        7         Pacific        0       0         0       1        0       1        0       1        0       1        0       1        0       1        0       1        0       1        0       1        0       1        0       1       1.1        0       0       0       N       N       N       0       0       N       N       N       0       0       N       N       N       0       0       N       N       N       0       0       N       N       N       0       0       N       N       N       0       0       N       N       N       0       0       N       N       N       N       0       0		N														
Pacific       -       0       0       -       -       -       0       1       1       2       7       40       71       971       1,128         Alaska       N       0       0       N       N       N       0       0       N       N       -       0       1       -       5         California       N       0       0       N       N       N       0       0       N       N       3       36       59       865       1,049         Hawaii       -       0       0       -       -       -       0       1       1       2       -       0       2       11       5         Oregon <sup>§</sup> N       0       0       N       N       N       0       0       N       4       3       13       88       61         American Samoa       N       0       0       N       N       N       0       0       N       4       3       13       88       61         American Samoa       N       0       0       N       N       0       0       N       N       -       -       -		_								4						
California         N         0         0         N         N         N         0         0         N         N         3         36         59         865         1,049           Hawaii          0         0           0         1         1         2          0         2         11         5           Oregon <sup>§</sup> N         0         0         N         N         N         0         0         N         N          0         2         11         5           Oregon <sup>§</sup> N         0         0         N         N         N         0         0         N         N          0         2         7         8           Washington         N         0         0         N         N         N         0         0         N         N         4         3         13         88         61           American Samoa         N         0         0         N         N         0         0         N         N          0         0	, ,	_		0	_	_	_			1					971	
Hawaii       -       0       0       -       -       -       0       1       1       2       -       0       2       11       5         Oregon <sup>§</sup> N       0       0       N       N       N       0       0       N       N       -       0       2       11       5         Oregon <sup>§</sup> N       0       0       N       N       0       0       N       N       -       0       2       7       8         Washington       N       0       0       N       N       0       0       N       N       4       3       13       88       61         American Samoa       N       0       0       N       N       0       0       N       N       -       0       0       -       -       4         C.N.M.I.       -																
Washington         N         0         0         N         N         N         0         0         N         N         4         3         13         88         61           American Samoa         N         0         0         N         N         0         0         N         N         4         3         13         88         61           American Samoa         N         0         0         N         N         0         0         N         N         4         3         13         88         61           Guam                    4           Puerto Rico          0         0   -	Hawaii	_	0	0	_	_	_	0	1	1	2	_	0	2	11	5
American Samoa         N         0         0         N         N         0         0         N         N         -         0         0         -         4           C.N.M.I.         -																
Guam         -         0         0         -         -         0         0         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         -         0         0         -         -         0         0         -         -         0         0         -         -         0         0         -         -         0         0         -         -         0         0         -         -         0         0         -	American Samoa	Ν										_			_	
	Guam	_	0	0	_	_	_	0	0	—	—		0	0	_	_
		_			_	_										

Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Max \* Incidence data for reporting years 2007 and 2008 are provisional. \* Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720). \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

(26th Week)"						West Nile virus disease <sup>†</sup>											
		Neuroinvasive					Nonneuroinvasive <sup>§</sup>										
	Previous Current 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current		vious veeks	Cum	Cum			
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007		
United States	284	645	1,654	16,739	25,438	_	1	143	4	45	_	1	307	10	86		
New England	4	17	68	296	1,547	—	0	2	_	_	_	0	2	—	_		
Connecticut Maine <sup>¶</sup>	_	9 0	38 26	_	890 205	_	0	1 0	_	_	_	0 0	1 0	_	_		
Massachusetts	_	0	0		—	_	0	2	_	_	_	0	2	_	_		
New Hampshire Rhode Island <sup>¶</sup>	_	5 0	18 0	132	212	_	0 0	0 0	_	_	_	0 0	0 1	_	_		
Vermont <sup>¶</sup>	4	6	17	164	240	_	0	0	_	_	_	Ő	0	_	_		
Mid. Atlantic	30	57	117	1,395	3,089	_	0	3	_	1	_	0	3	_	1		
New Jersey New York (Upstate)	N N	0	0	N N	N N	_	0 0	1 2	_	_	_	0 0	0 1	_	_		
New York City	Ν	0	0	N	N	_	0	3	_		_	0	3	—	_		
Pennsylvania	30	57	117	1,395	3,089	_	0	1	_	1	_	0	1	_	1		
E.N. Central Illinois	24	155 13	378 124	3,859 618	7,413 648	_	0 0	19 14	_	3 3	_	0 0	12 8	_	2 1		
Indiana		0	222	_	—	_	0	4	_	—	_	0	2	_	_		
Michigan Ohio	10 13	59 55	154 128	1,504 1,492	2,800 3,192	_	0	5 4	_	_	_	0 0	1 3	_	1		
Wisconsin	1	7	32	245	773	_	Ő	2	_	_	_	Ő	2	_			
W.N. Central	3	22	145	730	1,090	_	0	41	_	6	_	0	118	1	43		
lowa Kansas	N	0 6	0 36	N 253	N 407	_	0 0	4 3	_	1 1	_	0 0	3 7	_	1 1		
Minnesota	_	0	0	—	_	_	0	9	_	1	_	0	12	_			
Missouri Nebraska¶	3 N	11 0	47 0	411 N	620 N	_	0 0	8 5	_	_	_	0 0	3 16	_	14		
North Dakota		0	140	48		_	0	11	_	3	_	0	49	1	15		
South Dakota	—	0	5	18	63	—	0	9	—	—	—	0	32	—	12		
S. Atlantic Delaware	33 4	93 1	161 4	2,708 24	3,201 24	_	0 0	12 1	_	1	_	0 0	6 0	_	1		
District of Columbia	_	0	3	17	21	_	0	Ó	_	_	_	Ō	0	_	_		
Florida Georgia	25 N	30 0	87 0	1,094 N	726 N	_	0 0	1 8	_	_	_	0 0	0 5	_	1		
Maryland <sup>¶</sup>	N	0	0	N	N	_	0	2	_	_	_	0	2	_	_		
North Carolina South Carolina <sup>¶</sup>	N 4	0 16	0 66	N 522	N 679	—	0	1 2	_	_	_	0 0	2	_	_		
Virginia	4	21	73	639	1,053	_	0	2 1	_	1	_	0	1	_	_		
West Virginia	_	15	66	412	698	_	0	0	_	_	_	0	0	_	_		
E.S. Central Alabama <sup>¶</sup>	4 4	16 16	97 97	759 751	313 312	_	0 0	11 2	3	8	_	0 0	14 1	3	3 1		
Kentucky	Ň	0	0	N	N	_	0	1	_	_	_	0	0	_	_		
Mississippi Tennessee¶	N	0 0	2 0	8 N	1 N	_	0 0	7 1	3	7 1	_	0 0	12 2	2 1	_2		
W.S. Central	180	171	886	5,744	7,003	_	0	36	_	6	_	0	19	5	5		
Arkansas <sup>®</sup>	7	11	42	347	442	_	0	5	_	1	_	0	2	_	_		
Louisiana Oklahoma	N	1 0	7 0	27 N	89 N	_	0 0	5 11	_	1	_	0 0	3 8	2	_		
Texas <sup>¶</sup>	173	161	852	5,370	6,472	_	0	19	_	4	_	0	11	3	5		
Mountain	5	39	105	1,219	1,758	—	0	36	1	8	_	0	148	—	17		
Arizona Colorado	2	0 16	0 43	550	677	_	0	8 17	1	7	_	0 0	10 67	_	1 7		
Idaho <sup>¶</sup>	N	0	0	N	N	_	Ō	3	_	_	_	0	22	_	5		
Montana <sup>¶</sup> Nevada <sup>¶</sup>	3 N	6 0	25 0	176 N	270 N	—	0 0	10 1	_	_	_	0 0	30 3	_	1		
New Mexico <sup>¶</sup>		4	22	128	274	_	0	8	_	_	_	0	6	_	_		
Utah	_	9 0	55 9	360	519	_	0 0	8	_	1	_	0	9	_	2		
Wyoming <sup>1</sup> Pacific	1	1	9	5 29	18 24	_	0	8 18	_		_	0 0	34 23	- 1	1 14		
Alaska	1	1	4	29	24	_	0	0	_	_	_	0	0	_	_		
California Hawaii	—	0 0	0 0	_	_	_	0 0	18 0	—	12	—	0 0	20 0	1	13		
Hawaii Oregon <sup>¶</sup>	N	0	0	N	N	_	0	3	_	_	_	0	0 4	_	1		
Washington	Ν	0	0	Ν	Ν	_	0	0	_	—	—	0	0	—			
American Samoa	N	0	0	N	N	_	0	0	_	_	_	0	0	_	_		
C.N.M.I. Guam	_	2	17	55	173	_	0	0	_	_	_	0	0	_	_		
Puerto Rico	2	10	37	255	429	—	0	0	—	—	—	0	0	—	—		
U.S. Virgin Islands		0	0				0	0		_		0	0	_			

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I. Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm. Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

#### TABLE III. Deaths in 122 U.S. cities,\* week ending June 28, 2008 (26th Week)

		All causes, by age (years)			(		All causes, by a			y age (ye	age (years)				
Reporting Area	All Ages	<u>&gt;</u> 65	45-64	25-44	1-24	<1	P&l <sup>†</sup> Total	Reporting Area	All Ages	<u>&gt;</u> 65	45-64	25-44	1-24	<1	P&I <sup>†</sup> Total
New England	458	<u>2</u> 00 310	110	15	12	11	40	S. Atlantic	1,333	786	346	113	52	34	69
Boston, MA	118	65	35	7	7	4	16	Atlanta, GA	122	70	39	7	3	3	1
Bridgeport, CT	30	24	5	_	1	—	4	Baltimore, MD	128	62	46	12	7	1	11
Cambridge, MA	12	7	4	1	_	_	2	Charlotte, NC	115	72	24	14	5	_	10
Fall River, MA Hartford, CT	29 42	23 29	6 10	1	2	_	1 3	Jacksonville, FL Miami, FL	139 105	86 69	30 22	14 11	8 3	1	11 18
Lowell, MA	29	23	5	1		_	1	Norfolk, VA	52	26	17	5	2	2	10
Lynn, MA	5	4	1	_	_	_	_	Richmond, VA	42	27	13	1	_	1	1
New Bedford, MA	21	15	5	_	_	1	_	Savannah, GA	67	45	15	5	2	_	1
New Haven, CT	U	U	U	U	U	U	U	St. Petersburg, FL	51	37	5	2	3	4	2
Providence, RI	45	29	14	_	1	1	_	Tampa, FL	218	149	44	13	7	5	10
Somerville, MA Springfield, MA	1 33	20	1 7	1	1	4	4	Washington, D.C.	282	134 9	88 3	29	12	17	3
Waterbury, CT	27	20	4	2	_		2	Wilmington, DE	12			_		_	_
Worcester, MA	66	50	13	2	_	1	7	E.S. Central	923	583	221	68	29	22	88
Mid. Atlantic	1,876	1,265	443	108	36	24	83	Birmingham, AL	190 94	119 66	38 17	21 5	4 6	8	26 7
Albany, NY	43	27	443 9	4	1	24	63 5	Chattanooga, TN Knoxville, TN	94 112	68	32	9	1	2	8
Allentown, PA	26	24	2	_	_		2	Lexington, KY	77	52	16	4	_	5	4
Buffalo, NY	69	51	14	3	1	_	7	Memphis, TN	160	112	32	9	4	3	22
Camden, NJ	33	15	9	6	1	2	1	Mobile, AL	90	47	31	5	6	1	6
Elizabeth, NJ	12	6	5	_	1		3	Montgomery, AL	49	29	15	2	1	2	3
Erie, PA Jersey City, NJ	46 U	37 U	7 U	U	1 U	1 U	 U	Nashville, TN	151	90	40	13	7	1	12
New York City, NY	1,038	707	247	61	13	10	32	W.S. Central	1,591	978	392	136	41	44	75
Newark, NJ	59	27	20	5	2	5	5	Austin, TX	90	49	23	12	2	4	4
Paterson, NJ	22	12	8	1	1	_	2	Baton Rouge, LA	70	40	15	10	1	5	
Philadelphia, PA	167	93	48	15	9	2	5	Corpus Christi, TX Dallas, TX	50 226	31 114	15 67	3 21	13	11	2 12
Pittsburgh, PA§	43	29	10	3	1		1	El Paso, TX	113	81	19	8	5		1
Reading, PA	30	24	4	1		1	1	Fort Worth, TX	108	69	28	4	5	2	7
Rochester, NY Schenectady, NY	103 20	72 15	28 5	_	3	_	11 1	Houston, TX	403	247	96	40	10	10	20
Scranton, PA	35	31	3	1	_	_	2	Little Rock, AR	78	53	16	6		3	
Syracuse, NY	60	44	13	2	1	_	2	New Orleans, LA <sup>1</sup>	U	U	U	U	U	U	U
Trenton, NJ	35	22	7	4	1	1	_	San Antonio, TX Shreveport, LA	246 75	146 56	67 14	22 4	4	7 1	14 4
Utica, NY	16	14	1	1	_	_	2	Tulsa, OK	132	92	32	6	1	1	11
Yonkers, NY	19	15	3	1	_	_	1	Mountain	1,090	697	262	81	24	25	68
E.N. Central	1,895	1,208	465	130	38	54	121	Albuquerque, NM	121	72	33	12	3	1	7
Akron, OH Canton, OH	58 44	39 33	13 8	3	1 1	2 2	3	Boise, ID	61	35	15	9	2	_	3
Chicago, IL	329	184	96	27	11	11	29	Colorado Springs, CO		34	18	3	1	1	4
Cincinnati, OH	85	59	16	5	2	3	9	Denver, CO	85	52	22	6	3	5 5	10
Cleveland, OH	199	134	48	12	4	1	6	Las Vegas, NV Ogden, UT	239 38	167 26	54 11	10	- 3	э 1	18 3
Columbus, OH	178	117	40	15	4	2	12	Phoenix, AZ	160	90	42	15	8	4	8
Dayton, OH Detroit, MI	116 164	77 83	25 51	10 22	1 3	3 5	11 5	Pueblo, CO	36	28	4	3	1	_	4
Evansville, IN	34	26	6	22			1	Salt Lake City, UT	117	69	22	14	4	8	4
Fort Wayne, IN	50	30	12	4	1	3	5	Tucson, AZ	176	124	41	9	2	_	7
Gary, IN	13	9	2	2	_	_	2	Pacific	1,585	1,070	361	93	42	19	156
Grand Rapids, MI	49	35	8	2	1	3	3	Berkeley, CA	12	10	_	2	_	_	1
Indianapolis, IN	174 30	102 22	45	14	8	5 1	10 1	Fresno, CA	87	55	20	5	4	3	7
Lansing, MI Milwaukee, WI	30 77	51	6 21	4	1	_	9	Glendale, CA Honolulu, HI	34 69	28 48	5 14	4	3	_	4 7
Peoria. IL	49	37	6	_	_	6	2	Long Beach, CA	63	36	16	7	4	_	14
Rockford, IL	42	29	9	2	_	2	2	Los Angeles, CA	238	136	70	20	7	5	33
South Bend, IN	51	36	15	—	_	_	3	Pasadena, CA	30	20	6	1	3	_	5
Toledo, OH	96	61	26	4	_	5	3	Portland, OR	115	81	26	7	_	1	7
Youngstown, OH	57	44	12	1	_	_	5	Sacramento, CA San Diego, CA	180 133	123 97	37 27	10 5	8 3	2 1	20 3
W.N. Central	629	409	158	36	13	13	44	San Francisco, CA	133	97 78	30	э 8	3 2	1	3 17
Des Moines, IA	80	57	18	5	_	_	7	San Jose, CA	202	153	37	7	3	2	19
Duluth, MN Kansas City, KS	29 44	22 23	7 13	6	2	_	3 2	Santa Cruz, CA	38	30	6	2	_	_	5
Kansas City, MO	109	23 68	31	4	2	4	2	Seattle, WA	106	65	29	7	2	3	7
Lincoln, NE	35	28	6			1	_	Spokane, WA	70	47	18	2	2	1	4
Minneapolis, MN	58	38	11	4	1	4	7	Tacoma, WA	89	63	20	5	1	_	3
Omaha, NE	71	53	16	1	_	1	8	Total	11,380**	7,306	2,758	780	287	246	744
St. Louis, MO	103 32	42	40	13 2	6	2 1	2 3								
St. Paul, MN Wichita, KS	32 68	28 50	1 15	2	2	_	3								
	00	50	15	1	2		5	1							

U: Unavailable. —:No reported cases. \* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included. \* Pneumonia and influenza.

<sup>1</sup>Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks. <sup>1</sup>Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted. \*\* Total includes unknown ages.

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